SDS TOYOTA Hilux

RZN142, 144, 147, 148, 149, 154, 168, 169, 193
VZN167, 172

Jan. '04

		1RZ	2RZ-FE	3RZ-FE	5VZ-FE
	cm³ or CC *(cu. in.)*	1998 *(121.9)*	2438 *(148.8)*	2694 *(164.4)*	3378 *(206.1)*
※ mm *(in.)* / N *(kgf)*		7–8 *(0.28–0.31)* ※295–440 *(30–45)*			14–17 *(0.59–0.79)* ※245–392 *(25–40)*
		10–13 *(0.39–0.51)* ※196–392 *(20–40)*			5–7 *(0.20–0.28)* ※196–392 *(20–40)*
		9–12 *(0.35–0.47)* ※196–343 *(20–35)*	6–7.5 *(0.24–0.30)* ※245–392 *(25–40)*		8.5–10 *(0.33–0.39)* ※245–392 *(25–40)*
A mm *(in.)*	DENSO	G.C.C. W16EXR-U Others W16EX-U	K16R-U		K16TR11
	NGK	G.C.C. BPR5EY Others BP5EY	BKR5EYA		BKR5EKB11
	A	0.8 *(0.031)*			1.1 *(0.043)*
kΩ		25			26
BTDC		3–7° (w/ Sub-Vacuum Advance cut)	3–7° (DLC3 Terminals 13(TC)–4(CG) Connected)		10° (DLC1 Terminals TC–EI Connected)
mm *(in.)*	H	0.20–0.30 *(0.008–0.012)*	0.15–0.25 *(0.006–0.010)*		0.13–0.23 *(0.006–0.009)*
	C	0.25–0.35 *(0.010–0.014)*	0.25–0.35 *(0.010–0.014)*		0.27–0.37 *(0.011–0.014)*
rpm	H	700–800	650–750 (DLC3 Terminals 9(TACH)Connected)	Unleaded: 650–750 Leaded: 750–850 (DLC3 Terminals 9(TACH)Connected)	650–750
*1 CO%	H	1.0–2.0	0–0.5	Unleaded: 0–0.5 Leaded: 1.0–2.0	0–0.5

kPa *(kgf/cm², psi)*		1230 *(12.5, 178)*	1230 *(12.5, 178)*	1200 *(12.2, 174)*
	⬆	⬆ 880 *(9.0, 127)*		⬆ 1000 *(10.2, 145)*
	⬇	⬇ 98 *(1.0, 14)*		⬇ 100 *(1.0, 15)*
kPa *(kgf/cm², psi)*	⬆	⬆ 29 *(0.3, 4.3)*		⬆ 29 *(0.3, 4.3)*
	3,000 rpm	245–490 *(2.5–5.0, 36–71)*		245–520 *(2.5–5.3, 36–75)*
N·m *(kgf·cm, ft·lbf)*	A	① 39 *(400, 29)* ② 90° ③ 90°		① 34 *(350, 25)* ② 90° ③ 90°
	B	29 *(300, 21)*		18 *(180, 13)*
	C	49 *(500, 36)*		40 *(500, 36)*

		1RZ	2RZ-FE	3RZ-FE	5VZ-FE
liter *(US qts, Imp. qts)*		4.0 *(4.2, 3.5)*	2WD except Pre Runner 4.0 *(4.2, 3.5)* 4WD and Pre Runner 5.3 *(5.6, 4.7)*		4.7 *(5.0, 4.1)*
		4.7 *(5.0, 4.1)*	2WD except Pre Runner 4.7 *(5.0, 4.1)* 4WD and Pre Runner 6.0 *(6.3, 5.3)*		5.0 *(5.3, 4.4)*
		20W-50 and 15W-40– API grade SJ or SL multigrade engine oil 10W-30 and 5W-30– API grade SJ "Energy-Conserving", SL "Energy-Conserving" or ILSAC*2 multigrade engine oil			
liter *(US qts, Imp. qts)*		w/ Heater 7.8 *(8.2, 6.9)* w/o Heater 7.3 *(7.7, 6.4)*	w/ Heater 7.4 *(7.8, 6.5)* w/o Heater 6.9 *(7.3, 6.1)*	w/ Heater 7.7 *(8.1, 6.8)* w/o Heater 7.2 *(7.6, 6.3)*	7.0 *(7.4, 6.2)*

Printed in Japan

*1 In the 2 mode (2,500 rpm and idle) test, follow the measurement order prescribed by the applicable local regulations.
*2 ILSAC: International Lubricant Standardization and Approval Committee

TOYOTA MOTOR CORPORATION

Pub. No. SDS478E

Hilux

RZN142 – *005270*~ RZN144 – *0049988*~ RZN147 – *0048414*~ RZN148 – *0011355*~ RZN149 – *0132917*~
RZN154 – *0004914*~ RZN168 – *0008495*~ RZN169 – *0029893*~ RZN193 – *0001537*~
VZN167 – *0005050*~ VZN172 – *0001533*~

TOYOTA QUALITY SERVICE

	RZN
A	LHD : 173 *(6.811)* RHD : 177 *(6.968)*
B	5–15 *(0.197–0.591)*
C	⇧ 25 *(0.984)*
	SAE J1703 or FMVSS No. 116 DOT3

mm *(in.)*

	4×2 (Except Pre Runner)	4×4 (Include Pre Runner)
A	LHD : 161.1 *(6.343)* RHD : 167.7 *(6.579)*	
B	1–6 *(0.04–0.24)*	
C*1	LHD : ⇧80 *(3.1)* RHD : ⇧85 *(3.3)*	LHD : ⇧75 *(2.9)* RHD : ⇧80 *(3.1)*
	SAE J1703 or FMVSS No. 116 DOT3	

mm *(in.)*

196 N *(20kgf, 44.1lbf)*	11–17
A	⇧ 1.0 *(0.039)*
B	⇧ 23.0 *(0.906)* / ⇧ 18.0 *(0.709)*
	⇧ 1.0 *(0.039)*
	⇩256.0 *(10.079)* / ⇩297.0 *(11.693)*

mm *(in.)*

	4×2	4×4
A	A+[6.0–18.0] *(0.6–1.8 1.3–4.0)*	A+[18.0–37.0] *(1.8–3.8 4.0–8.3)*
N *(kgf, lbf)*		
N·m *(kgf·m, ft·lbf)*	137 *(14, 101)*	105 *(10.7, 77.4)*

	4×2	4×4
	1RZ 2.2 *(2.3, 1.9)* Others 2.6 *(2.7, 2.3)*	5VZ–FE 2.2 *(2.3, 1.9)* Others 2.5 *(2.6, 2.2)*
liter *(US qts, Imp. qts)*	**API GL–4 or GL–5 SAE 75W–90**	
	5VZ–FE 2.0 *(2.1, 1.8)* Others 1.6 *(1.7, 1.4)*	
liter *(US qts, Imp. qts)*	**5VZ–FE Toyota Genuine ATF Type T-IV**	Others Toyota Genuine ATF DII or DEXRON®III (DEXRON®II)
liter *(US qts, Imp. qts)*	—	1.1 *(1.2, 1.1)*
liter *(US qts, Imp. qts)*	**API GL–4 or GL–5 SAE 75W–90**	

Except Pre Runner		Include Pre Runner	
—	G.C.C. 2.4 *(2.5, 2.1)* Except G.C.C. 3RZ (M / T) 2.0 *(2.1, 1.8)* Others 1.8 *(1.9, 1.6)*	w / A.D.D. 1.86 *(1.97, 1.65)* w / oA.D.D. 1.6 *(1.7, 1.4)*	2RZ-FE 3RZ-FE Colombia 2.2 *(2.3, 1.9)* Except Colombia 2.7 *(2.9, 2.4)* 5VZ-FE B-cab and W-cab 2.2 *(2.3, 1.9)* C-cab 2.4 *(2.5, 2.1)*

Hypoid gear oil API GL–5
With LSD use LSD oil only
SAE90 (⇧ –18°C (0°F))
SAE 80W or 80W –90
(⇩ –18°C (0°F))

liter *(US qts, Imp. qts)*

	RZN
	⇩ 30 *(1.2)*

mm *(in.)*

	4×2 (Except Pre Runner)					4×4 (Include Pre Runner)		
	B–cab		W–cab		C–cab	B–cab	W–cab	C–cab
	Short	Long	DLX	SR				
A	**Please refer to the Repair Manual 5VZ-FE Pub.No.RM963E Others Pub.No.RM909E (Service Specification)**							
B								
C								
D	35° +1° –2°					RHD 32°20′ +1° –2° LHD 33° +1° –2°		
	37° +1° –2°					33°20′ +1° –2°		

	Please refer to the Repair Manual 5VZ-FE Pub.No.RM963E Others Pub.No.RM909E (Service Specification)

mm *(in.)*

185R14C–8PR	220 *(2.2, 32)* 200 *(2.0, 29)* *6	450 *(4.5, 65)*
195R14C–8PR	220 *(2.2, 32)*	450 *(4.5, 65)* 220 *(2.2, 32)* *5
195/80R15 103/101LLT	180 *(1.8, 26)*	375 *(3.75, 54)* 180 *(1.8, 26)* *7
195R15C 103/101R	180 *(1.8, 26)*	375 *(3.75, 54)*
205/70R15C 8PR	200 *(2.0, 29)*	400 *(4.0, 58)* *2 200 *(2.0, 29)* *3
205R16 Reinforced	170 *(1.7, 25)*	240 *(2.4, 35)* 170 *(1.7, 25)* *5,*7
205R16C–6PR	170 *(1.7, 25)*	300 *(3.0, 44)* 220 *(2.2, 32)* *5
255/70R15C 112R	190 *(1.9, 28)*	240 *(2.4, 35)*
255/70R15 112LLT	190 *(1.9, 28)*	240 *(2.4, 35)* *4 190 *(1.9, 28)* *5
Front 6.00–14–6PRLT Rear 6.50–14–8PRLT	200 *(2.0, 29)* *2 180 *(1.8, 26)* *3	425 *(4.25, 62)* *2 240 *(2.4, 35)* *3
7.00–16–8PRLT	240 *(2.4, 35)*	425 *(4.25, 62)*

kPa *(kgf/cm² or bar, psi)*

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*1 When brake pedale is depressed with force of 490 N (50 kgf, 110 lbf) while engine is running.
*2 General (Loaded) *3 General (Unloaded) *4 Australia (Loaded)
*5 Australia (Unloaded) *6 RZN142 models only *7 Chiri

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